

REMARKS/ARGUMENTS

Reconsideration of this application, as amended, is respectfully requested.

I. Status of the Claims

Claims 1-14 have been canceled without prejudice or disclaimer of the subject matter therein.

Claims 15-18 have been added.

Claims 15-18 are pending.

The new claims, 15-18, do not add new matter.

II. Rejections Under 35 U.S.C. §102

Claim 13 stands rejected under 35 U.S.C. §102 as being anticipated by U.S. Patent No. 5,717,839 issued to Ichikawa (hereinafter Ichikawa). Applicants have canceled claim 13, and have thus rendered the rejection moot.

III. Rejections Under 35 U.S.C. §103

Claims 8-11 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ichikawa in view of U.S. Patent No. 5,617,223 issued to Burns et al. (hereinafter “Burns”).

Summary of the Present Invention

There are problems associated with printing pictures captured by digital cameras; the present invention addresses one of those problems. All digital cameras of a given camera-type will generate similar associated image deficiencies. The current invention is directed to correcting image deficiencies associated with a given digital camera-type by identifying the camera-type used to capture the image from the actual image data to be

printed. The present invention does not require an analysis of the deficiencies of the image, but assumes the deficiencies are present once the camera-type is identified, and corrects them. Further, the present invention does not require any user input in order to specify the camera-type that captured a given image, but rather determines the camera-type directly from the image to be printed. The correction function is not derived for each picture, but rather stored by camera type and applied to the image once the device determines the camera-type that was used to capture the image data. Those values could be, for example, correction values for the intensity fall off of the image, which is often observed at the corners of the image and is caused by low-quality lenses in the camera. Every amended claim in the present invention contains the limitation that the camera-type be identified from the *image* data.

Ichikawa: U.S. Patent No. 5,717,839

Ichikawa is directed to an image processor capable of correcting digital image defects based on the camera-type used to capture the digital image. However, as the Examiner acknowledged, “Ichikawa does not teach that the identification means are implemented in such a way that image data can be evaluated from at least one of the images which is to be printed.” Office Action dated December 1, 2003, page 3-4. Rather, Ichikawa identifies the camer-type from a preamble, which is stored before the image file. (Col. 6, lines 17-20 and Fig. 2). All amended claims of the present invention require identification of the camera-type from the *image* data, not a preamble to the image data as disclosed in Ichikawa.

Burns: U.S. Patent No. 5,617,223

Burns is directed to the correction of digital images acquired from a scanner. The extent of the image correction performed according to Burns is limited to simple correction characteristics such as tone and exposure. (Col. 4, lines 53-62). Thus, although Burns does determine specific image correction values from the images to be printed, the system of correcting images according to Burns does not include correcting for the defects common to the scanner used to capture the image. In other words, Burns is directed to a method for detecting defects and generating corrections for the image-specific defects, but not detecting the scanner-type used to capture the image and then correcting for scanner-specific defects by applying a pre-determined correction function.

There is no motivation for one skilled in the art to combine the teachings of Burns and Ichikawa. Ichikawa is directed to correcting camera-specific image defects, whereas Burns is directed to correcting image-specific image defects. And Burns does not teach how to identify the camera-type from one of the images to be printed, which Ichikawa requires order to perform the camera-specific image corrections. Thus, the present invention is not rendered obvious by Ichikawa in view of Burns because there is no teaching in Burns that would enable one skilled in the art to combine the references.

Even if one skilled in the art were to combine the feature of Ichikawa for correcting camera-specific deficiencies, with the feature of Burns that generates image correction values from one of the images to be printed, all of the features claimed in the present invention would not be achieved. Rather, the result would be a system that corrects some image defects by detecting the deficiencies directly from the image, while still employing the method disclosed in Ichikawa to determine camera-type used to

capture the image so as to correct the camera-specific deficiencies. Thus, the result of the combination of Ichikawa and Burns would not achieve the limitation present in every amended claim of the present invention that the camera-type is determined from the *image* data.

Therefore, applicants respectfully submit that Ichikawa does not teach or suggest, alone or in combination with Burns, all of the elements of claims 8-11 and 14. However, in order to better draw out the novel features of the present invention, discussed below, claims 8-11 and 14 have been cancelled, and new claims 15-18 have been added.

Rhoads: U.S. Patent No. 5,636,292

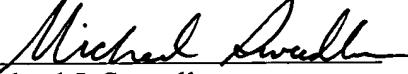
Claim 12 stands rejected under 35 U.S.C. 103 (a) as being unpatentable over Ichikawa, in view of Burns, and in further view of U.S. Patent No. 5,636,292 issued to Rhoads (hereinafter Rhoads). Applicants have cancelled claim 12. However, new claims 16 and 18 both employ a steganographic method for hiding information identifying the camera type in the data provided by the camera. Rhoads is directed to a method for “performing a positive identification between a copy of an original signal and the original.” (Col. 3, line 18-19). There is no suggestion in Rhoads that the method disclosed in the reference could be used for hiding camera identification data within image data captured by a camera in order to enable correction of camera-specific deficiencies in the image. Therefore, applicants respectfully submit that Rhoads is a non-analogous art to that being claimed in the present invention, and therefore it would not be obvious to one skilled in the art to apply the techniques taught in Rhoads to digital image correction.

CONCLUSION

In view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

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Respectfully submitted,

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